

In The Claims:

This list of claims will replace all prior versions and listings of claims in the application. Please amend the claims as set forth below.

Claims 1-76 canceled.

77. (Currently amended) A method of communicating information across a plurality of paths, wherein each path of said plurality of paths begins near a first point and terminates near a second point, and each path of said plurality of paths is a 2-wire ~~conducted~~ conducting path, the method comprising:

converting a first stream of digital data into a plurality of sub-streams, wherein

(a) each sub-stream of said plurality of sub-streams is a stream of digital data,

(b) the number of sub-streams is equal to the number of paths in said plurality of paths,

(c) ~~the~~ information content of each sub-stream in said plurality of sub-streams includes a different part of the information in said first stream of digital data, and

(d) ~~[[the]]~~ a data rate of each sub-stream is less than ~~[[the]]~~ a data rate of said first stream of digital data,

encoding each sub-stream in said plurality of sub-streams into a different one of a plurality of downstream signals, wherein substantially all of the power spectrum of each of said plurality of downstream signals is above 3 KHz;

transmitting each one of said plurality of downstream signals onto ~~[[the]]~~ a first end of a different one of said plurality of paths, wherein said first end is located near said first point;

receiving one of said plurality of downstream signals from ~~[[the]]~~ a second end of each of said plurality of paths, wherein said second end is located near said second point;

recovering one of said plurality of sub-streams from each one of said plurality of downstream signals; and

creating a first recreated stream of digital data from the plurality of sub-streams recovered from said plurality of downstream signals, wherein the first recreated stream of digital data is substantially ~~identical to the same as~~ said first stream of digital data and the first stream of digital data and the first recreated stream of digital data conform to the Ethernet protocol,[[;]]

~~including as part of the first recreated stream of digital data, a field of bits identifying an electronic device that will receive at least part of said first recreated stream of digital data; and~~

wherein said receiving of a first one of said plurality of downstream signals from a first one of said plurality of paths includes

(a) receiving while presenting a high impedance to signals within the telephone voiceband, [[; and]]

(b) ~~receiving voiceband signals from said first one of said plurality of paths while~~ presenting a high impedance to signals above voiceband while allowing signals in the telephone voiceband to pass, and

(c) ~~conversion of~~ converting said voiceband signals into sound, and wherein power is transmitted as an electrical current over at least one of the wires in said plurality of paths and the power is used by circuitry that performs said recovering and creating.

Claims 78 - 79 canceled.

80. (Previously presented) The method of claim 77 further including encoding said first recreated stream of digital data into an analog signal using Manchester coding.

81. (Previously presented) The method of claim 77 further including encoding said first recreated stream of digital data according to the 100BaseT standard.

82. (Canceled).

83. (New) The method of claim 77, wherein the plurality of downstream signals encodes a voice signal, a data signal and a video signal.

84. (New) The method of claim 77, wherein the plurality of downstream signals encodes voice information that is transmitted at frequencies above the voiceband, and said voice information is included in an ordinary telephone signal that is created from the first recreated stream of data.

85. (New) The method of claim 77, further including transmitting an upstream control signal from the second point to the first point,
wherein
the plurality of downstream signals encodes a video signal, and
said control signal has an influence on the content of said video signal.

86. (New) The method of claim 85, further including receiving an infrared (IR) signal, wherein said IR signal encodes information that is encoded in said control signal,

87. (New) The method of claim 83, wherein the first stream of digital data is created by a data switch.

88. (New) The method of claim 84, wherein the first stream of digital data is created by a data switch.

89. (New) The method of claim 86, wherein the first stream of digital data is created by a data switch.

90. (New) The method of claim 77, wherein the first stream of digital data is created by a data switch.

91. (New) A method of communicating information between a first point and a second point, comprising:

- encoding a plurality of streams of digital data into a single downstream signal;
- transmitting at the first point the single downstream signal on a path comprising a plurality of twisted wire pairs, wherein a portion of the encoded digital data is carried on each of two or more of the plurality of twisted wire pairs;
- transmitting power across at least two wires in the path;
- receiving the downstream signal at the second point from the path;
- recovering the single downstream signal from the portions of the single downstream signal carried on each of the two or more twisted pair wires in circuitry at the second point;
- powering the circuitry at the second point using the power transmitted across the at least two wires in the path;
- recovering one of the plurality of streams of digital data from the single downstream signal;
- creating a first recreated stream of digital data from the recovered one of the plurality of digital data, wherein the first recreated stream of digital data includes a field of bits identifying an electronic device that will receive at least part of said first recreated stream of digital data;
- presenting a high impedance to signals within the telephone voiceband;
- receiving voiceband signals from the path while presenting a high impedance to signals above voiceband; and
- converting the voiceband signals into sound.

92. (New) The method of claim 86, wherein the plurality of twisted wire pairs includes two sets of twisted wire pairs.

93. (New) The method of claim 86, wherein the plurality of twisted wire pairs includes three sets of twisted wire pairs.

94. (New) The method of claim 86, further including encoding said first recreated stream of digital data into an analog signal using Manchester coding.

95. (New) The method of claim 86, further including encoding said first recreated stream of digital data according to the 100BaseT standard.

96. (New) The method of claim 86, wherein the plurality of downstream signals includes a voice signal, a data signal and a video signal.

97. (New) The method of claim 86, wherein the plurality of downstream signals includes a digital data stream encoding voice information that is transmitted at frequencies above the voiceband.

98. (New) The method of claim 91, further including transmitting an upstream control signal on the path from the second point to the first point.

99. (New) The method of claim 96, wherein the first stream of digital data is created by a data switch.

100. (New) The method of claim 97, wherein the first stream of digital data is created by a data switch.

101. (New) The method of claim 77, wherein the first stream of digital data is created by a data switch.